

An Essay on
Chromic Acid.

Respectfully submitted
for examination in the laboratory,
to the Faculty of the
Homeopathic Medical College
by myself one of my fellow students
in the said Pennsylvania, and before
they are given out on the 22nd day of January
Twenty second day of January.

Eighteen Hundred & Fifty two,
by

Henry Duffield
of
Pennsylvania

Chromic Acid

Peroxide of Chromium

Chro. Cr.

This Acid is of a dark red color almost black
when hot, sour, and metallic and volatile in
Water.

In accordance with the recommendation
of several of the Professors of the Institution,
of which I have the honor to be a member,
I have selected as the subject of a Thesis,
the properties of Chromic Acid, made
by myself and one of my fellow Students,
in the early part of the session, and hope
they may prove acceptable, and an useful
addition to our Materie Medicæ.

Obtained by a gentle heat, the Hydrosulphuric
sulphur and the Chromic Acid is retained pure.
Or instead of using the ~~water~~ vapour, it is better
to strike against a sheet of blotting paper
thoroughly crumpled by the hand into a ball, the paper
will be dry as before, and the Chromic Acid
obtained in dry crystals.

Francis Chemical Experiment

Chromic Acid

Peroxide of Chromium Ch. + O₂.

This Acid, is of a dark red color, almost black when heated; Sour, and Metallic, and Soluble in Water.

To procure the Acid, mix four parts of Chromic Yellow (Chromate of Lead) with three parts of finely powdered Fluor Spar, previously treated to reduce, and five parts of Strong Sulphuric Acid. Heat this in a Leaden or Silver Retort, and a red vapour will be liberated. This vapour is the Fluoride of Chromium, which by adding water, is decomposed into Hydrofluoric, and Chromic Acids. By evaporating the solution by a gentle heat, the Hydrofluoric acid escapes, and the Chromic Acid is retained pure.

Or. Instead of receiving the red vapour into water, let it strike against a sheet of blotting paper loosely compressed by the hand into a ball; the vapour will be decomposed as before, and the Chromic Acid obtained in dry crystals.

(Francis' Chemical Experiments)

The following is another, and said to be a better mode of procuring pure Chromic Acid, and was that used in procuring the Acid used in the following proofs.

Formulas $\text{Chr} + \text{O}_3$.

Chromsuperfluoride, $\text{Chr} + \text{F}_6$, produced when combining in contact with water, Chromic Acid and Fluoric Acid.

$\text{Chr} + \text{F}_6$ and $3\text{H}_2\text{O}$ give $\text{Chr} + \text{O}_3$ and $3\text{H}_2 + \text{F}_2$. Mix four parts of Chromic-acid-oxide of Lead with three parts of Fluor Spur, free from Silicic Acid, and seven parts of Smoking (Strong) Sulphuric Acid, in a Retort of Lead or Platina, and conduct the escaping vapours (gasses) of Superfluoride into a Platina Crucible containing water, in which decomposition takes place. Then evaporating the fluid in the Crucible, the Fluoric Acid escapes, and the Chromic Acid remains in form of a dark red, but not crystalline substance.

If the Platina Crucible is moistened with water, and the opening covered with moist paper, the

decomposition of Chloro-superfluoric gas which is conducted into it takes place by the moisture of the air thus produced; Fluoric acid gas escapes, and the Crucible is filled with a very loose mass of fine barbed needle like Crystals of Chloric Acid, ~~and at~~

By these processes it forms in the one case a red substance; and in the other red needle like Crystals.

When heated it appears black - is easily soluble with water, and forms a brown Solution.

It readily parts with its Oxygen, and when coming in contact with organic bodies, especially with Alcohol, sugar, or paper, becomes disengaged, and an Oxid.

~~Hydrochloric~~ In the preparation of the medicine, the brown substance was used. Seven grains of it was dissolved in One hundred drops of distilled water, and one drop of the Solution taken to Ninety Nine drops of distilled water, and 25 Shakes given. The first Six Potions were prepared in this manner. From the 6th to the 30th Alcohol was used. Potions and

Proving of Chronic Acid
first and second First Prover

On the 3rd, 4th and 5th days of November three doses per day of the medicine was taken, beginning with one drop, and increasing the dose one drop at each time. The 5th Potency was used.

Novem. 4th Dull pain over the left eye as if headache would set in.

Novem. 5th At 10 A.M. Throbbing pulsation sensation from the region of the heart to the left eye, and left side of the head, with a general feeling of fullness in the frontal region.

Slightly acute pains in the left Hypochondria. Appetite good. Bowels regular. Pulse full and a little accelerated.

At 10. P.M. sensation of lightness of the head like vertigo, with heat in the face. Late going to sleep, with restlessness during the night and anxious dreams.

Novem. 6th Began with the 6th Potency and

continued till the 9th evening, 3 doses of opy, 1 drop of the same
first and increasing as before. the anus, during stool,

At 10 A.M. Dull aching pain on the top of the left
shoulder, as if from great fatigue, which lasted two
hours. Pulse 62. (Normal Pulse 55) ~~weak~~

At 10 P.M. Pulse 56. Restless bitter.

Novem. 7th At 7 A.M. Pulse 64.

At 8 A.M. Haemorrhoidal discharge from
the anus, during stool. ~~the same sensation~~

At 12 M. Pulse 56. At 3 P.M. 64.

At 9 P.M. Pain in Lumbar region of the
Back. Pulse 64. ~~extreme pain has ceased~~

At night disturbing dreams. About to be put
to death by poison, and at same time innocent of
Crime. ~~discharge from Anus during stool~~

Novem 8th At 7 A.M. Pulse 48. ~~sensation~~

At 10 A.M. sensation of paralysis in Right
leg from the Knee down. Pulse 62.

At 10 P.M. Pulse 62. Head with a
pimple. At night slept well. ~~at the back~~

Novem 9th At 8. A.M. Pretty copious Hemorrhoidal discharge from the anus, during stool, with weakness in the small of the back.

Accumulation of tough mucus in the throat with constant inclination to swallow it, as it could not be easily hawked up. ~~followed in the~~
Pulse 64. Restless pulse at night.

Novem 10th Accumulation of mucus as yesterday accompanied with the same sensations.

At 7 A.M. Pulse 48. At 3 P.M. 64.

Very painful External piles on left side of Anus.

Novem 11th The External piles have disappeared this, and are internal and bleeding.

Novem 12th At 8 A.M. Hemorrhoidal discharge from Anus during stool. ~~the last~~
Feeling of fullness in the Head, and sensation of rawness or soreness in the Chest with a slight dry hacking cough. ~~the morning~~
At night fullness of the Head, with a peculiar sensation of tightness at the heart,

and Vertigo when descending stairs. the cause of
Feet Colic. (Naturally becoming hot) a few

Novem. 13th At 8. A.M. Pulse 72.

A slight pain and throbbing pulsation in the
left Lung. still. Diaphoretic discharge from the

Throbbing and sensation of fullness in the
forepart of the head, and of emptiness in the
Chest, with soreness on pressure; and cold feet.

Eyes sore, and feel heavy as if inflamed to the

Pulse 84 at 4 P.M.

At night dreamed that I had an attack of
strangury, which on awaking in the morning
proved to be the case, and from which I did
not get relief for nearly two hours.

Novem 18th For four successive days took
two doses per day of the 30th Potency, increasing
each dose as before.

Novem 20th At 4 o'clock this morning
was awakened with a feeling of uneasiness in the
lower part of the Abdomen, which was very

sore to the touch, especially along the course of the Colon, accompanied with nausea, and frequent evacuations, and retchings, throwing off white mucus. Pulse 52.

At 8. A.M. Diarrhetic discharge from the bowels after which the Pulse rose to 75.

No appetite for Breakfast.

At 10 A.M. while walking sensations of Vertigo which inclined me continually to the right side. and my vision very much affected.

Weakening in the Chest, and a kind of rattling in the left knee joint when walking.

At 4 P.M. Pulse 75.

At 8 P.M. Weakening and rattling of the left knee joint when walking.

At 8 $\frac{1}{2}$ P.M. small stool of mucus and knotty faeces.

November 21. Slept well until 5 o'clock this morning when I awoke with sensation of fullness in the vertex and frontal region, about the same as yesterday.

At 8 A.M. Copious Hemorrhoidal discharge during stool. Pulse 70.

Left knee joint still weak and Knocking.

At 4 P.M. Weakness and pain in the small of the back.

At 6 P.M. while sitting, a sharp shooting pain from Lumbar vertebrae to the crest of the Ilium of the right side.

Yesterday and to day my mind has been in a state of great confusion, and my memory very much affected; at times to such a degree that I found myself at a loss when writing to know how to make several of the letters of the Alphabet.

Lips dry and disposed to chap. Pulse 70 all day.

Novem 22^o Had a restless night, with a sensation of swelling of the ball of the Eyes, which continued until after I arose. They feel as if much enlarged.

At 7^{1/2} A.M. Pulse 80. At 3 P.M. 76. Good appetite. The sensation of fullness of the head, and confusion of mind and memory about the same as yesterday.

Novem 23. Slept well all night, but had un-
pleasant dreams which cannot be remembered.

At 10 A.M. Sensation of coldness on the
back of the neck.

In the afternoon and evening, rheumatic
feeling in the right knee joint.

Novem 24. Rested well last night.

At 10 A.M. Stiffness of the muscles on the
left side of the back of the neck, and stricture in
the chest in the region of the heart. Pulse 82.

At 12 M. Pain from ball of right eye up into the
anterior of the Brain, with sensations of the hot to the
touch, and throbbing pulsation through the chest,
with cold feet, even when walking. Pulse 58.

At 3 P.M. Shooting pain from small of the back
into the left hip bone. Pulse 68.

In this moon, the irregularity of the pulse was very re-
markable. On some days in a single hour the varia-
tions would range from 60 to 84, the pulsations, scarcely ever
being the same in two successive hours.

Second prove.

1st proving

Novem 3rd. For 4 successive days this proveer took two doses per day of the 9th potency.

On the fourth day he felt a "general coldness all over". "At night many dreams - he dreams of crossing a stream on horseback, the stream, and the water on him freezes". "Pulse below standard."

2nd proving.

After an interval of about two weeks, this proveer commenced with the 30th potency which he took for four or five days, two or three doses per day, increasing at every dose.

Novem 20th. Bowels regular, and in usual health otherwise. Diet plain & uniform

Pulse 58. (Normal Pulse 64)

Novem. 21st. Felt an uneasiness in the bowels before rising in the morning, similar to the premonitory symptoms of Diarrhea, which passed away on rising.

At 10. A.M. felt a heavy pain along the

Coronal Suture, extending backward, occupying all the Parietal portion of the head. Was not relieved by eating dinner, nor by warmth nor cold, nor an hours walk in the cold air. - These symptoms remained until 4 P.M.

At 2 P.M. After dinner qualmishness of the Stomach which lasted until 4 P.M.

Became excessively sleepy an hour before his usual bed time.

Novem. 22^o. Awoke at 5 A.M. very restless. Could not lie quiet 5 minutes at a time.

At 6. A.M. Experienced a severe sharp pain in the Hypogastrine region, and along the ascending Colon, which became very severe and cutting, and lasted half an hour when he was relieved by a profuse Diarrhoea which lasted 3 hours. Then the symptoms all ceased, and recurred the same as yesterday set in, followed by the same sickness of Stomach, both of which lasted until 4 P.M. as before.

Novem 26th Awoke this morning with pain in the Colon, accompanied with numbness of voice, which passed off on rising. Headache set in at 10 AM and continued until 4 PM as before."

After an interval of some days, this noon received the usual doses, of the effects of which he says "All the symptoms returned in the above order, but lighter each time of trial."

And in a note accompanying his proving, he says, "The last medicine, 30th potency, affected the circulation. My pulse was slower, and I could not get warm for nearly a week after I had finished the medicine."

Having in the foregoing pages given the proving in detail, as exhibited from day to day, I shall now proceed to arrange the symptoms, according to the various organs and parts affected, and in the order in which I find them in Hahnemann's work, knowing that I could not leave a better model.

Chronic Acid.

Arrangement of symptoms according to the organs
and parts affected.

Mind

1. Confusion of mind. 1st Prov. 12th day. 30th potency.

— Loss of memory - unable to form the letters of the alphabet.
1st P. 12th day. 30th po.

Head

— Dull pain over the left orbit. 1st day. 5th po. 1st Prov.

— Throbbing sensation in the left side of the head, extending from the heart. 2nd day. 5th po. 1st P.

5. Sensation of fullness in front of head. 2nd day. 5th po.

— Feeling of fullness in the head with sensation of lightness at the heart, and vertigo when descending stairs, and

— Cold feet. 9th day. 6th po. 1st P.

— Throbbing and sensation of fullness in front head, and cold feet. 10th day 6th po. 1st P.

— Sensation of fullness in the vertex, and over the frontal region. 12th day. 30th po. 1st P.

10. Sensation of fullness in the head, and confusion

of mind. 13th day. 30th P.M. 1st P.

15. Pain in anterior part of the brain extending from the right eye. 15th day. 30th P.M. 1st P.

Heavy pain along the coronal suture, and both parietes, commencing at 10 A.M. and lasting until 4 P.M. 2nd. 3rd & 4th days. 30th P.M. 2nd P.

Sensorium

Sensation of lightness of the head like vertigo with heat in the face. 2nd day 5th P.M. 1st P.

Vertigo when descending stairs, with sensation of lightness at the heart. 9th day. 6th P.M. 1st P.

15. Sensation of vertigo while walking, with inclination to the right side. 11th day. 30th P.M. 1st P.

This sensation lasted for several days

Eyes.

1. Throbbing pulsation from region of the heart to the left eye. 2nd day. 5th P.M. 1st P.

Eyes sore & feel heavy as if inflamed. 11th day. 6th P.M. 1st P.

Sensation of swelling of the ball of the eye, which feel enlarged. 13th day. 30th P.M. 1st P.

Pain in the ball of the right eye extending up into the anterior part of the brain - with soreness to the touch. 15th day. 30th po. 1st P.

Face

20. Heat in the face with lightness of the bones. 2nd day. 5th po 1st P.

Stomach

21. Nausea and eructations 11th day. 30th po. 1st P.

Retching up of white mucus. 11th day. 30th po. 1st P.

Nausea from 2 to 4 P.M. 1st. 2. 3rd day. 30th po. 2nd P.

Abdomen

22. Acute pain in Left Hypochondria. 2nd day. 5th po. 1st P.

23. Uneasy sick feeling in the lower part of the abdomen. 11th day. 30th po. 1st P.

24. Soreness of the abdomen to the touch, especially on the course of the Colon. 11th day 30th po. 1st P.

25. Gurglings in the bowels before rising. 1st day. 30th po. 2nd P.

26. Seven sheep poiss in Hypogastric region, and along the ascending Colon. 2nd day. 30th po. 2nd P.

27. Rumbling of wind in the abdomen, with pain in the colon. 3rd day. 30th po. 2nd P.

Stool and Anus.

30. Internal bleeding Hemorrhoids. 4th 6th 8th
and 9th days. 6th po. 1st P.
- External Hemorrhoids on the left side of
the Anus. 7th day 6th po. 1st P.
- Diarrhea. 11th day. 30th to 1st P.
- Stool of mucus and knotty feces. 11th day 30th po. 1st P.
- Diarrhea from 7 to 10. A.M. 30th po. 2nd P.

Urinary Organs.

35. Stranguary. 10th day. 6th po. 1st P.
- Throat.
- Accumulation of tough mucus with inclination
to swallow. 6th & 7th days. 6th po. 1st P.
- Mucus in the throat which could not be hacked up.

Chest.

- Throbbing pulsation from the heart to the left eye
and side of the head. 2nd day. 6th po. 1st P.
- Feeling of rawness and soreness in the chest with
dry hacking cough. 9th day. 6th po. 1st P.
40. Sensation of lightning at the heart, with

- Vertigo when descending stairs. 9th day. 6th po. 1st P.
- Pain & throbbing sensation in right lung. 10th day. 6th po.
- Feeling of emptiness in the Chest, with soreness on pressure - and cold feet. 10th day. 6th po. 1st P.
- Stricture in the region of the heart. 15th day. 30th po. 1st P.
- Throbbing pulsation through the chest - with cold feet. 15th day. 30th po. 1st P.

55. Weakening of back in the left knee joint

45. Pain in the Lumbar region. 4th day 6th po. 1st P.
45. Weakness in the muscle of the back from hemorhoids. 6th day. 6th po. 1st P.
- Weakness and pain in the muscle of the back. 12th day. 30th po. 1st P.
- Sharp shooting pain from the Lumbar vertebrae to the crest of the right ilium. 13th day. 30th po. 1st P.
- Sensation of coldness in the back of the neck. 14th day. 30th po. 1st P.
50. Stiffness of the muscles on the right side of the back of the neck. 15th day. 30th po. 1st P.
- Shooting pain from the back into left hip bone. P.

Superior Extremities

63 Dull aching pain on the top of the left shoulder, as if from great fatigue for 2 hours. 3rd day. 6th mo. 1st P.

Lower Extremities

— Sensation of paralysis in the right leg from the knee down. 5th day. 6th mo. 1st P.

— Itching in the left knee joint. 11th day. 30th mo. 1st P.

55 Weakness of, and cracking in the left knee joint when walking. 11th & 12th days. 30th mo. 1st P.

— Rheumatic feeling in right knee joint. 14th d. 30th mo. 1st P.

— Cold feet. 9th to 10 days 6th mo. 1st P.

70 — Cold feet even when walking. 15th day. 30th mo. 1st P.

Sleep and Dreams

— Late going to sleep. 2nd day. 5th mo. 1st P.

60 — Great restlessness during the night. 5th mo. 1st P.

— Anxious dreams 2nd d. 5th mo 1st P.

— Distressing dreams. Dreams he is about to be put to death by poison. 8th day. 6th mo. 1st P.

— Dreamed he had an attack of stranguary, which was the case on awakening in the morning. 10th day. 6th mo. 1st P.

- 64 Restless at night. 13th d. 30th po. 1st P.
- 65 Unpleasant dreams which he cannot remember. 14th day. 30th po. 1st P.
- 66 At night many dreams. 7th po. 2nd P.
- 67 He dreams of crossing a stream on horseback. the stream and the water on him freezes. 7th po. 2nd P.
- 68 Excessively sleepy on board before his usual bed time. 30th po. 2nd P.
- 69 Awoke at 5 A.M. very restless - could not lie quiet five minutes at a time 30th po. 2nd P.
- 70 ~~Awaking~~ ^{never} dull party, especially in
70. At 10 A.M. Pulse 62. Normal pulse 55. - 3rd d. 6th to 1st P.
71. Pulse 64. in the morning. 56 at noon, and 64 at night. 4th day. 6th po. 1st P.
- 72 Pulse 48 in the morning. 62 at noon & night. 5th d. 6th po 1st P.
- 73 Pulse 64 generally through the day. 6th d. 6th po. 1st P.
- 74 Pulse 48 in the morning - 64 in afternoon. 7th d. 6th po. 1st P.
75. Pulse 72 in the morning - 84 in afternoon. 10th d. 6th po. 1st P.
- 76 Pulse 52 at 4 in the morning - 78 at 8 A.M., and 75 in the afternoon. 11th day. 30th po. 1st P.

Pulse 70 all day. 12th day. 30th po. 1° P.

Pulse 80 in the morning - 76 in afternoon, 13th d. 30th po. 1° P.

Pulse 82 in the morning - 58 at noon - and 68 in the afternoon. 15th day. 30th po. 1° P.

80. Pulse runs below the standard. 9th po. 2° P.

10. Pulse 58. (Normal pulse 64) 30th po. 2° P.

Pulse generally slow'd. 2° P.

General symptoms.

Great irregularity of the Pulse.

Dull aching pains in various parts of the body.

85 Throbbing pulsations in different parts, especially in the chest and region of the heart.

Sensation of coldness in different parts.

Acute pains in the region of the colon, and back and hips.

General coldness all over lasting several days.

Aggravation from 6 A.M till 4 P.M.